

Session VI

Subsystems I

Co-Chairmen:

S. B. Moghe
Northrop Inc.

V. Peterson
Hewlett-Packard Co.

This session discusses the latest developments in MMIC subsystems and their applications in DBS and millimeter wave receivers, EHF Satcom terminals, and monopulse radar systems. The DBS receiver work shows improvements in performance and manufacturability of MMICs for commercial applications. A paper on monolithic monopulse comparator shows significant developments in realizing a monopulse radar, using MMIC summing and difference amplifiers. As further extension of this work another paper describes a millimeter wave monopulse receiver with 8.7 dB NF and 19 dB conversion gain at 35 GHz. In low power MMIC subsystems area significant improvements have been made using E/D process for L band transmit receive systems. Many of the papers in this session show that the MMIC technology is maturing to the point where many systems applications are emerging.